

ECON 228
Environmental Economics, Spring 2009
Wellesley College

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Office Hours:
Mon 3:00-4:30
Thurs 3:00-4:30

A. Course Overview and Goals

Environmental economists apply the theories and tools of economics to issues of natural resource use and pollution. More precisely, they use economic tools to *describe* existing levels of resource use and pollution and to *prescribe* better levels and better policies for achieving them. Of course, what constitutes “better levels” and “better policies,” and even what issues merit attention, are not easily resolved questions. For this reason, I have chosen texts and readings representative of various approaches.

The first and narrower goal of this course is to help you understand the scope, theories and methods of environmental economics. A second and broader goal is to encourage you to hone your critical analysis skills. It is important to me that you actively engage with the material, attempting to square it with what you already know about the world and asking what additional information you need to accept or reject an idea.

B. Prerequisites

ECON 101. This prerequisite is not just a formality; much environmental economic analysis uses theories and models covered in introductory microeconomics. Therefore, you are expected to have taken Econ 101 *and* recall the material. If you are rusty on the concepts from Econ 101, or on basic algebra and graphical techniques, please dig out the appropriate textbooks and review them.

C. Readings

We'll use two textbooks in this class: 1) Eban S. Goodstein (2007) *Economics and the Environment*, 5th ed. and 2) James K. Boyce (2002), *The Political Economy of the Environment*. Supplementary readings will be distributed in class or via the course conference. These have not been included in the syllabus to allow for inclusion of current events and flexibility with respect to class needs.

D. Course Requirements

This course meets from 1:30-2:40 on Mondays and Thursdays. Your grade will be assigned according to the following rubric:

1. *Participation (5%)*.
 - a. Designated questioner (3%). Three times each term, you will be a DQ. Responsibilities include 1) reading the assigned material extra closely, 2) anticipating which parts of the material warrant special attention (difficult concepts, discussion-worthy ideas, etc.), and 3) posting relevant questions or

comments to the student discussion sub-conference *by 10pm on the day before class*. Everyone is welcome to post to the discussion board at any time, but it is a requirement for the DQs.

- b. Good, old-fashioned class participation (2%). This includes coming to class already having read the material assigned for that day's class, asking thoughtful questions, and contributing to discussions, group work and the online discussion board as appropriate.
2. *Homework (20%)*. There will be four homework assignments, including a mixture of problems and short essay responses. You are encouraged to work with others on the homework, but you must turn in your own answers. Late homework will be accepted on the following terms: 30 percentage points will be deducted for each day it is late, with the first 'day' beginning immediately after the class in which it is due.
3. *Exams (50%)*. There will be midterms on March 12 (25%) and April 30 (25%). These are in-class exams, though part of the grade will likely come from a take-home essay question.
4. *Research paper and class presentations (25%)*. Students will work in groups of three to research a local environmental issue and present their research in class. The associated term paper may be written in groups or individually. Guidelines are attached to the syllabus.

E. Grading

Percentages translate into grades as follows: A = 93 or higher, A- = 90 – 92, B+ = 87-89, B = 83-86, B- = 80-82 and so on (all decimals will be rounded down). As a rule, I do not grade "on the curve," but in accordance with a new college policy, final grades will be adjusted downward, if necessary, to create a median of B+ or below.

F. Syllabus (over)

Econ 228 Topic List
Last Updated: 23-Apr-09

Date	Topic	Textbook Readings	Due
Feb 2 (M)	Introductions	Goodstein: Ch. 1	
Feb 5 (Th)	Political economy and the environment	G: Ch. 2; Boyce: Ch. 1	
Feb 9 (M)	Pollution as an externality	G: Ch. 3	
Feb 12 (Th)	How much pollution?: Efficiency standard	G: Ch. 4	
Feb 16 (M)	No School		
Feb 19 (Th)	Safety standard; <i>Film: Laid to Waste</i>	G: Ch. 5; B: Ch. 2	
Feb 23 (M)	Sustainability standard I: Neoclassical	G: Ch. 6	HW #1
Feb 26 (Th)	Sustainability standard II: Ecological	G: Chs. 7 and 11; B: Ch. 3	
Mar 2 (M)	Benefits of environmental protection	G: Ch. 8	Proposal 1
Mar 5 (Th)	Costs of environmental protection	G: Ch. 9	
Mar 9 (M)	Benefit-cost analysis	G: Ch. 10; B: Ch. 4	HW #2
Mar 12 (Th)	MIDTERM #1		
Mar 16 (M)	Regulation I	G: Ch. 12 & 13	
Mar 19 (Th)	Regulation II	G: Ch. 14	
Mar 23 (M)	Spring break		
Mar 26 (Th)	Spring break		
Mar 30 (M)	<i>Film: Taken for a Ride</i>		
Apr 2 (Th)	Incentive-based regulation I: Theory	G: Ch. 16	Proposal 2
Apr 6 (M)	Incentive-based regulation II: Practice	G: Ch. 17	
Apr 9 (Th)	Promoting clean-energy technology: Theory	G: Ch. 18	HW #3
Apr 13 (M)	Energy policy and the environment	G: Ch. 19	
Apr 16 (Th)	Climate change		
Apr 21 (Tu)	Climate change	G: Ch. 22	
Apr 23 (Th)	Poverty, population, environment	G: Ch. 20; B: Chs. 5	
Apr 27 (M)	Environment and development in 'poor countries'	G: Ch. 21	
Apr 30 (Th)	Summary and In-class Review		HW #4
May 4 (M)	MIDTERM #2		
May 7 (Th)	Presentations		
May 11 (M)	Presentations		
May 18 (M)	PAPERS DUE		

G. Research Paper Guidelines

Topic

Your research paper should be about the political economy of a local environmental issue, either in the greater Boston area or an area with which you and your groupmates are personally familiar.

Information Sources

Interviews with individuals who are engaged with this issue – including local officials, environmental activists, concerned citizens, and private-sector businesses – should constitute the primary sources of information for your paper. Secondary sources may include newspaper and magazine articles, documents produced by governmental agencies and non-governmental entities, television and radio reports, etc.

Framework

While your sources will be largely “popular” (non-academic), you should analyze this information within a political economy cost-benefit framework using the following outline:

1. *Introduction*: Briefly describe the environmental issue that your paper will analyze and how you became aware of it.
2. *Benefits*: Describe the individuals, groups, or classes who benefit (or benefited in the past), as producers or consumers, from the economic activity that has created this environmental problem. What forms do these benefits take (e.g., higher profits, lower prices for consumers)? Attempt to assess the economic magnitude of the benefits received (i.e., in dollar terms).
3. *Costs*: Describe the individuals, groups, or classes who bear the resulting environmental costs. What forms do these costs take (e.g., effects on health, property values, quality of life)? Attempt to assess the economic magnitude of these costs (again in dollar terms), based on the techniques discussed in class.
4. *Political economy*: Why are the beneficiaries able to impose environmental costs on others? Has their ability to do so changed over time (for example, as a result of community pressures or government policies)? How and why?
5. *What is to be done?*: In light of your research, what (if anything) do you think can and should be done differently to address this environmental issue?

Requirements

Groups: Project research and presentations must be done in groups of three. Papers can be written individually or in groups of two or three.

Proposals (2% of total course grade): One very short proposal, identifying your group members and the proposed topic, will be due on Mar 2 (0.5%). A longer proposal, including a 1-2 page summary of the topic and a list of sources (to be) consulted, will be due on Apr 2 (1.5%).

Paper (15%): If you choose to write the paper with at least one other person, it should be 4,000 words in length (~15 pages). If you write the paper individually, it should be 3,000 words in length (~12 pages). Papers will be due on Monday, May 18.

In-Class Presentations (8%): Each group will give a 15-minute presentation of their research in class on May 7 or 11. Part of your grade in this category will be based on your attendance at other groups' presentations. You're welcome, but certainly not required, to make a video for this part if it helps illustrate the problem better.